

ABSTRACT

A flame atmosphere analyzer is described and comprises a tube, in which an air-gas intake and mixing chamber is defined, a gas-supply nozzle, and primary combustion-air supply means opening into the intake chamber, as well as
5 a flame burner comprising at least one flame jet which is in flow communication with the intake and mixing chamber in order to supply an air-gas mixture formed in the chamber. The primary air-supply means comprise at least one duct which has a first end in flow communication with the intake chamber and which is open at the opposite, second end in order to take in primary combustion air in a
10 position remote and at a predetermined distance from the intake chamber in the tube. A water-heating device including the above-mentioned flame atmosphere analyzer is also described.